CLAIMS

1. A recordable disk, comprising:

a first plurality of S_1 servo sample wedges in a first servo zone at an outermost position on the disk;

a second plurality of S_2 servo sample wedges in a second servo zone which is radially adjacent the first servo zone, where $S_2 = S_1/N_1$ and S_1, S_2, and N_1 are integers $\geq$ 2; and

the S_2 servo sample wedges of the second plurality being in radial alignment with every N_1th wedge of the S_1 servo sample wedges of the first plurality.

2. The recordable disk of claim 1, further comprising:

the S_1 servo sample wedges of the first plurality being equally spaced apart circumferentially around the disk by a first angle θ_1; and

the S_2 servo sample wedges of the second plurality being equally spaced apart circumferentially around the disk by a second angle $\theta_2 = \theta_1 * N_1$.

3. The recordable disk of claim 2, wherein $N_1 = 2$.

4. The recordable disk of claim 2, further comprising:

a third plurality of S_3 servo sample wedges in a third servo zone which is radially adjacent the second servo zone, where $S_3 = S_2/N_2$ and S_3 and N_2 are integers $\geq$

2; and

the S_3 servo sample wedges of the third plurality being in radial alignment with a every N_2th wedge of the S_2 servo sample wedges of the second plurality.

5. The recordable disk of claim 4, further comprising:

the S_3 servo sample wedges of the third plurality being equally spaced apart circumferentially around the disk by a third angle $\theta_3 = \theta_2 * N_2$.

6. The recordable disk of claim 5, wherein $N_2 = 2$.

7. The recordable disk of claim 1, further comprising:

a third plurality of S_3 servo sample wedges in a third servo zone which is radially adjacent the second servo zone, where $S_3 = S_2/N_2$, and S_3 and N_2 are integers $\geq$ 2;

the S_3 servo sample wedges of the third plurality being in radial alignment with every N_2th wedge of the S_2 servo sample wedges of the second plurality;

the S_1 servo sample wedges of the first plurality being equally spaced apart circumferentially around the disk by a first angle θ_1;

the S_2 servo sample wedges of the second plurality being equally spaced apart circumferentially around the disk by a second angle $\theta_2 = \theta_1 * N_1$; and

the S_3 servo sample wedges of the third plurality being equally spaced apart circumferentially around the disk by a third angle $\theta_3 = \theta_2 * N_2$.

8. A recordable disk, comprising:

a first plurality of S_1 servo sample wedges in a first servo zone at an outermost position on the disk;

the S_1 servo sample wedges of the first plurality being equally spaced apart circumferentially around the disk by a first angle θ_1;

a second plurality of S_2 servo sample wedges in a second servo zone which is radially adjacent the first servo zone, where $S_2 = S_1/N_1$ and S_1, S_2 and N_1 are integers $\geq$ 2;

the S_2 servo sample wedges of the second plurality being equally spaced apart circumferentially around the disk by a second angle $\theta_2 = \theta_1 * N_1$; and

the S_2 servo sample wedges of the second plurality being in radial alignment with every N_1th wedge of the S_1 servo sample wedges of the first plurality.

9. A recording device, comprising:

at least one recordable disk;

a spindle supporting the at least one recordable disk;

a motor for rotating the at least one recordable disk;

a recording head for recording data to the at least one recordable disk;

the at least one recordable disk further including:

a first plurality of S_1 servo sample wedges in a first servo zone at an outermost position on the recordable disk;

a second plurality of S_2 servo sample wedges in a second servo zone which is radially adjacent the first servo zone, where $S_2 = S_1/N_1$ and S_1, S_2, and N_1 are integers ≥ 2; and

the S_2 servo sample wedges of the second plurality being in radial alignment with every N_1th wedge of the S_1 servo sample wedges of the first plurality.

10. The recording device of claim 9, further comprising:

the S_1 servo sample wedges of the first plurality being equally spaced apart circumferentially around the disk by a first angle θ_1; and

the S_2 servo sample wedges of the second plurality being equally spaced apart circumferentially around the disk by a second angle $\theta_2 = \theta_1 * N_1$.

11. The recording device of claim 10, wherein $N_1 = 2$.

12. The recording device of claim 10, further comprising:

a third plurality of S_3 servo sample wedges in a third servo zone which is radially adjacent the second servo zone, where $S_3 = S_2/N_2$ and S_3 and N_2 are integers ≥ 2; and

the S_3 servo sample wedges of the third plurality being in radial alignment with every N_2th one of the S_2 servo sample wedges of the second plurality.

13. The recording device of claim 12, further comprising:

the S_3 servo sample wedges of the third plurality being equally spaced apart circumferentially around the disk by a third angle $\theta_3 = \theta_2 * N_2$.

14. The recording device of claim 13, wherein $N_2 = 2$.

15. The recording device of claim 9, further comprising:

a third plurality of S_3 servo sample wedges in a third servo zone which is radially adjacent the second servo zone, where $S_3 = S_2/N_2$ and S_3 and N_2 are integers $\geq$ 2;

the S_3 servo sample wedges of the third plurality being in radial alignment with every other one of the S_2 servo sample wedges of the second plurality;

the S_1 servo sample wedges of the first plurality being equally spaced apart circumferentially around the disk by a first angle θ_1;

the S_2 servo sample wedges of the second plurality being equally spaced apart circumferentially around the disk by a second angle $\theta_2 = \theta_1 * N_1$; and

the S_3 servo sample wedges of the third plurality being equally spaced apart circumferentially around the disk by a third angle $\theta_3 = \theta_2 * N_2$.

16. A method of writing servo samples on a recordable disk, the method comprising the acts of:

writing a first plurality of S_1 servo sample wedges in a first servo zone at an

outermost position on the recording disk; and

writing a second plurality of S_2 servo sample wedges in a second servo zone which is radially adjacent the first servo zone, such that the S_2 servo sample wedges of the second plurality are in radial alignment with every N_1th wedge of the S_1 servo sample wedges of the first plurality, where $S_2 = S_1/N_1$ and S_1, S_2, and N_1 are integers $\geq$ 2.

17. The method of claim 16, further comprising:

wherein writing the first plurality of S_1 servo sample wedges further includes writing such that the S_1 servo sample wedges of the first plurality are equally spaced apart circumferentially by a first angle θ_1; and

wherein writing the second plurality of S_2 servo sample wedges further includes writing such that the S_2 servo sample wedges of the second plurality are equally spaced apart circumferentially by a second angle $\theta_2 = \theta_1 * N_1$.

18. The method of claim 17, wherein $N_1 = 2$.

19. The method of claim 16, further comprising:

writing a third plurality of S_3 servo sample wedges in a third servo zone which is radially adjacent the second servo zone, such that the S_3 servo sample wedges of the third plurality are in radial alignment with every N_2th wedge of the S_2 servo sample wedges of the second plurality, where S_3 is an integer and $S_3 = S_2/N_2$.

20. The method of claim 16, further comprising:

wherein writing the third plurality of S_3 servo sample wedges further includes writing such that the S_3 servo sample wedges of the third plurality are equally spaced apart circumferentially by a third angle $\theta_3 = \theta_2 * N_2$.

21. The method of claim 16, wherein $N_2 = 2$.

22. The method of claim 16, further comprising:

writing a third plurality of S_3 servo sample wedges in a third servo zone which is radially adjacent the second servo zone, where $S_3 = S_2/N_2$ and S_3 and N_2 are integers ≥ 2;

wherein writing the third plurality of S_3 servo sample wedges further includes writing such that the S_3 servo sample wedges of the third plurality are in radial alignment with every N_2th wedge of the S_2 servo sample wedges of the second plurality;

wherein writing the first plurality of S_1 servo sample wedges further includes writing such that the S_1 servo sample wedges of the first plurality are equally spaced apart circumferentially by a first angle θ_1;

wherein writing the second plurality of S_2 servo sample wedges further includes writing such that the S_2 servo sample wedges of the second plurality are equally spaced apart circumferentially by a second angle $\theta_2 = \theta_1 * N_1$; and

wherein writing the third plurality of S_3 servo sample wedges further includes writing such that the S_3 servo sample wedges of the third plurality are equally spaced apart circumferentially by a third angle $\theta_3 = \theta_2 * N_2$.

23. A recordable disk, comprising:

a first plurality of S_1 servo sample wedges which are equally spaced apart circumferentially around the disk;

each wedge of the first plurality of S_1 servo sample wedges contiguously radially extending from an outermost position on the disk to an innermost position on the disk;

a second plurality of S_2 servo sample wedges which are equally spaced apart circumferentially around the disk and interleaved with the first plurality of S_1 servo sample wedges; and

each wedge of the second plurality of S_2 servo sample wedges contiguously radially extending from the outermost position on the disk to a first intermediate position on the disk in between the outermost and innermost positions.

24. The recordable disk of claim 23, wherein $S_1 = S_2$.

25. The recordable disk of claim 23, further comprising:

a third plurality of S_3 servo sample wedges which are equally spaced apart circumferentially around the disk and interleaved with the second plurality of S_2 servo sample wedges; and

each wedge of the third plurality of S_2 servo sample wedges contiguously radially extending from the outermost position on the disk to a second intermediate position on the disk in between the outermost position and the first intermediate position.

26. The recordable disk of claim 25, wherein $S_3 = S_1 + S_2$.

27. A method of track following on a recordable disk having a first plurality of S_1 servo sample wedges in a first servo zone and a second plurality of S_2 servo sample wedges in a second servo zone, wherein the S_1 servo sample wedges of the first plurality are equally spaced apart circumferentially around the disk by a first angle θ_1 and the S_2 servo sample wedges of the second plurality are equally spaced apart circumferentially around the disk by a second angle θ_2, the method comprising the acts of:

performing a track following operation based on detecting S_1 servo samples per disk revolution in the first servo zone; and

performing a track following operation based on detecting $S_2 = S_1/N_1$ servo samples per disk revolution in the second servo zone, where S_1, S_2, and N_1 are integers ≥ 2.

28. The method of claim 27, wherein the S_2 servo samples are in radial alignment with every N_1th sample of the S_1 servo samples.

29. The method of claim 28, wherein $N_1 = 2$.

30. The method of claim 27, further comprising:

performing a track following operation based on detecting $S_3 = S_2/N_2$ servo samples per disk revolution in a third servo zone, where S_3 and N_2 are integers ≥ 2.

31. The method of claim 30, wherein the S_3 servo samples are in radial alignment with every N_2th sample of the S_1 servo samples.

32. The method of claim 30, wherein $N_2 = 2$.